

Now let's pretend that there was a contest, to see which was the best way to keep time. I want you to decide which of these is the very best way to keep time and should get first prize, which one should get second prize, and which one is the worst way and should get third prize. I want you to work together to figure out which prize to give each picture. Let me know when you both agree on the prize each one should get. (*Interviewer withdraws and lets dyad talk and order pictures.. Give them a maximum of 5 minutes to do this. Don't tell them how much time they will have, but when they only have a minute left:*

Tell them: "You only have another minute or so to decide, so do the best you can and let me know as soon as you're done."

Once dyad tells interviewer that they agree... or time is up...

Okay, so you think that this one gets third prize, this one gets second prize and this one gets first prize? (*This is to check that the order goes left to right = worst to best.*)

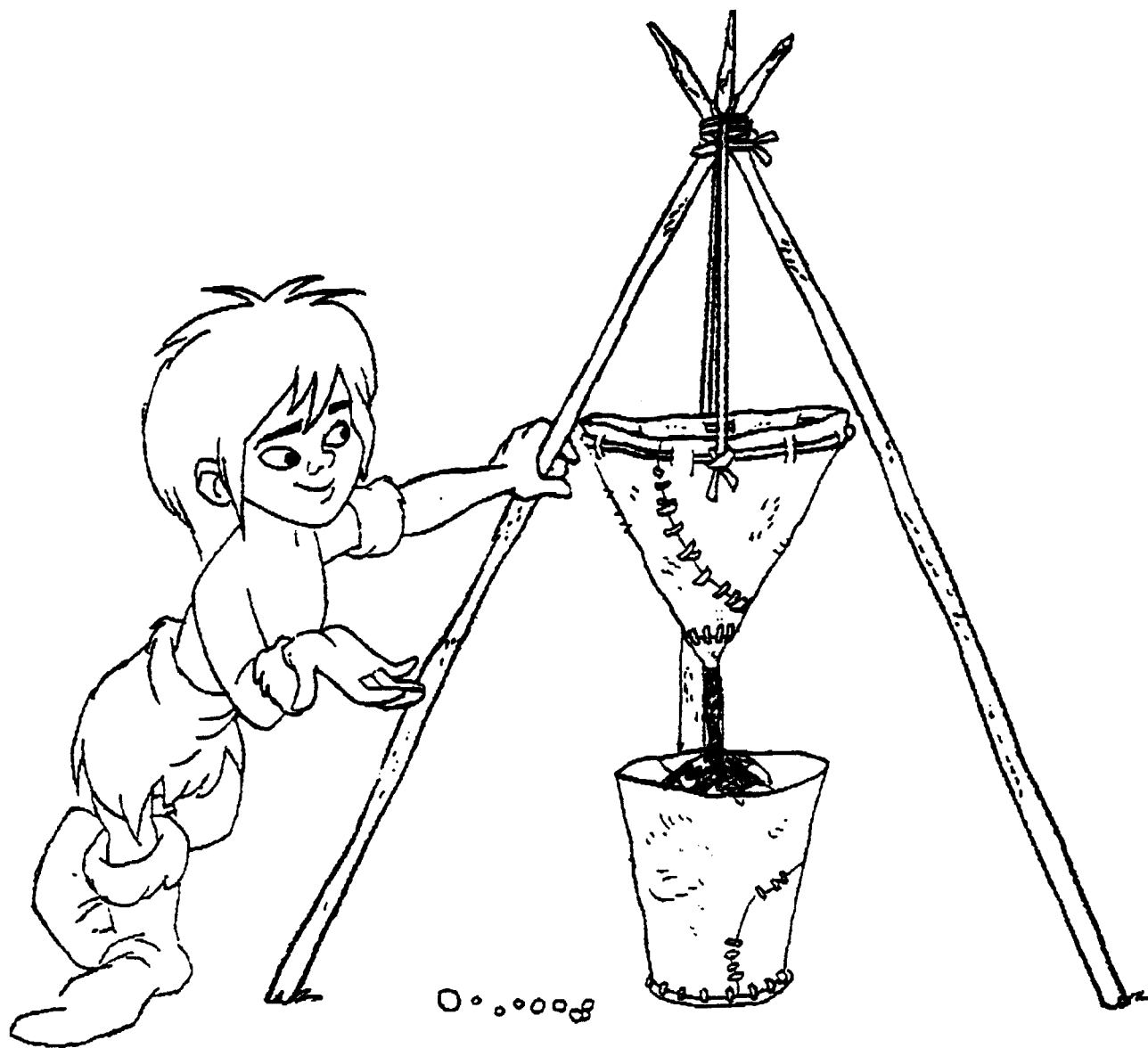
Do you both agree with this? *If no agreement (time is up or stalemate reached), interviewer asks each partner to explain own reasons for order following protocol: for Q.1-3)*

Mark order on cover sheet

Q.1. Okay, you said that this way of keeping time would get third prize. Why does this way get third prize?

Q.2. And this way of keeping time is better, and would get second prize, right? Why is this a better way for keeping time?

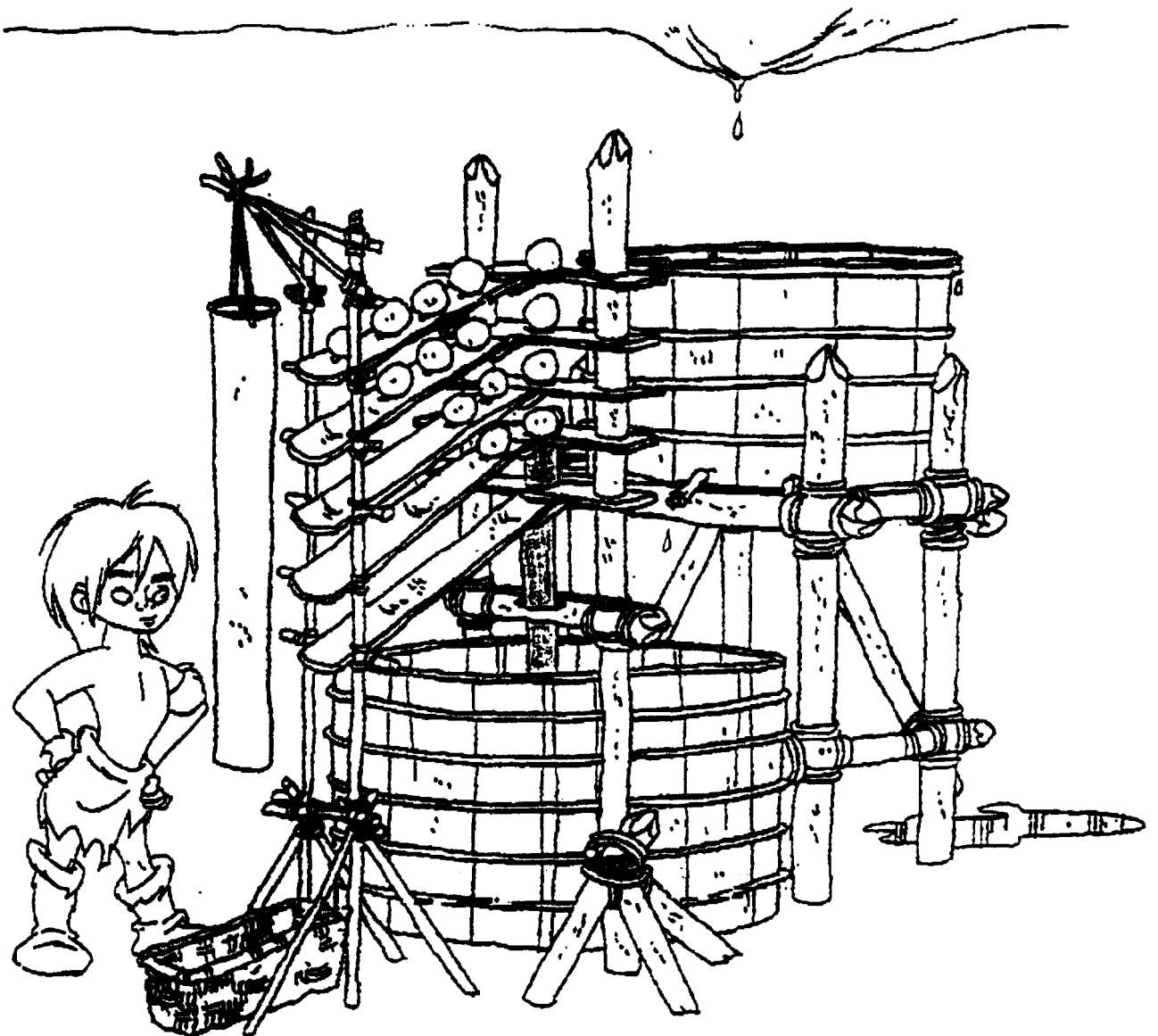
Q.3. Okay, you said that this was the best way for keeping time and should get first prize. Why is this the best way for keeping time?



"SAND"

B

D.47



"WATER"

C



"BUCKET"

School: McKelvy Fulton

Group: CSD CRO

Name: _____ Age: _____

Name: _____ Age: _____

Boys Girls Mixed

Interview Number. 1 2 3 4

.....

WRITE ORDER OF SORTING HERE - order them from worst to best

3rd 2nd 1st

_____ (child's initials if needed) _____

_____ (child's initials if needed) _____

Appendix D4:
Interview Four Protocols:
Buoyancy

Interview 4: CRO- Fulton/McKelvy

Hi. My name is _____, and today I would like to talk with you about some of the things we've been doing here this week.

Part I

- 1) What kinds of things did you see on CRO this week? (To see if kids spontaneously mention content vs. storyline)
- 2) One episode of CRO was about TRIGGERS & TRAPS and the other one was about MAKING HEAVY THINGS FLOAT.
What did you think about these CRO shows?
Did you like them or not like them? Why?

- 3) Would you want to find out more about TRIGGERS & TRAPS?
(If YES:) Why?
(If NO:) Why not?

Would you want to find out more about MAKING HEAVY THINGS FLOAT?
(If YES:) Why?
(If NO:) Why not?

- 4) While you were watching the show, were you thinking about anything or doing anything, or were you just watching?
(If thinking or doing:) What were you thinking about/ or doing?
- 5) Did you talk to anyone about what you saw on the two CRO shows?
(If YES:) Who did you talk to about the shows?
What did you talk about?
- 6) Was there anything that you did after you watched the shows to find out more about the stuff in the shows?
(If YES:) What did you do?
(If NOT topic-related:) Did you do anything to find out more about TRIGGERS & TRAPS OR MAKING HEAVY THINGS FLOAT?
(If YES:) What did you do?

(If NO to original question:) Did you do anything to find out more about TRIGGERS & TRAPS OR MAKING HEAVY THINGS FLOAT? (If YES:) What did you do?

Part II

Part II

Here are some pictures from the Cro show you just watched. In this story, the cavemen and some of the mammoths want to get a heavy statue {show the picture of the statue} out of a lake and they try a bunch of different ways to do it.

These are the different ways they try to get the statue out of the lake.

A. In this picture they tried to push a lot of little logs and balloons underwater and tied them onto the statue so the logs and balloons would pull the statue up. Do you understand the picture?

B. In this picture they tied vines onto the statue, stood on a raft in the lake, and tried to pull the statue up. Do you understand the picture?

C. In this picture, they tried to push a big log under water and tie it onto the statue so the log would pull the statue up. Do you understand the picture?

Let's pretend that there is a contest, for the best way to lift the statue up. I want you to decide which of these ways is the best way and should get first prize, which way should get second prize, and which is the worst way and should get third prize. I want you to talk it over between you, and when you have decided on the prizes to give to the different ways, you let me know.

{Mark order on the subject cover sheet}

1. Okay, now you said that this way would get third prize? Do you both agree? Why should this way get third prize?

(If no mention of whether the method would work):

Would this way be able to lift the statue up?

(If Yes): Why would this way work?

(If No): Why wouldn't this way work? Is there anything they could do to make this way work? (If Yes): What could they do? Why would that work?

2. Now you said that this way would get second prize, right? Why is this way better than this one which got third prize?

(If no mention of whether the method would work):

Would this way be able to lift the statue up?

(If Yes): Why would this way work?

(If No): Why wouldn't this way work? Is there anything they could do to make this way work? (If Yes): What could they do? Why would that work?

3. Okay, you said that this way of pulling the statue up was the best way and should get first prize, right? Why is this way better than these other two ways?

(If no mention of whether the method would work):

Would this way be able to lift the statue up?

(If Yes): Why would this way work?

(If No): Why wouldn't this way work? Is there anything they could do to make this way work? (If Yes): What could they do? Why would that work?

Interview 4: CARMEN- Fulton/McKelvy

Hi. My name is _____, and today I would like to talk with you about some of the things we've been doing here this week.

Part I

- 1) What kinds of things did you see on CARMEN SANDIEGO this week? (To see if kids spontaneously mention content vs. storyline)
- 2) One episode of CARMEN was about CHILDREN'S BOOKS and the other one was about TECHNOLOGY.

What did you think about these CARMEN shows?
Did you like them or not like them? Why?

- 3) Would you want to find out more about CHILDREN'S BOOKS?
(If YES:) Why?
(If NO:) Why not?

Would you want to find out more about TECHNOLOGY?
(If YES:) Why?
(If NO:) Why not?

- 4) While you were watching the show, were you thinking about anything or doing anything, or were you just watching?
(If thinking or doing:) What were you thinking about/ or doing?
- 5) Did you talk to anyone about what you saw on the two CARMEN shows?
(If YES:) Who did you talk to about the shows?
What did you talk about?
- 6) Was there anything that you did after you watched the shows to find out more about the stuff in the shows?
(If YES:) What did you do?
(If NOT topic-related:) Did you do anything to find out more about CHILDREN'S BOOKS OR TECHNOLOGY?
(If YES:) What did you do?

(If NO to original question:) Did you do anything to find out more about CHILDREN'S BOOKS OR TECHNOLOGY? (If YES:) What did you do?

Part II

Part II

Here are the final group of pictures from the comic book story about the cavemen and the mammoths. In this last story, the cavemen and some of the mammoths want to get a heavy statue {show the picture of the statue} out of a lake and they try a bunch of different ways to do it.

These are the different ways they try to get the statue out of the lake.

A. In this picture they tried to push a lot of little logs and balloons underwater and tied them onto the statue so the logs and balloons would pull the statue up. Do you understand the picture?

B. In this picture they tied vines onto the statue, stood on a raft in the lake, and tried to pull the statue up. Do you understand the picture?

C. In this picture, they tried to push a big log under water and tie it onto the statue so the log would pull the statue up. Do you understand the picture?

Let's pretend that there is a contest, for the best way to lift the statue up. I want you to decide which of these ways is the best way and should get first prize, which way should get second prize, and which is the worst way and should get third prize. I want you to talk it over between you, and when you have decided on the prizes to give to the different ways, you let me know.

{Mark order on the subject cover sheet}

1. Okay, now you said that this way would get third prize? Do you both agree? Why should this way get third prize?

(If no mention of whether the method would work):

Would this way be able to lift the statue up?

(If Yes): Why would this way work?

(If No): Why wouldn't this way work? Is there anything they could do to make this way work? (If Yes): What could they do? Why would that work?

2. Now you said that this way would get second prize, right? Why is this way better than this one which got third prize?

(If no mention of whether the method would work):

Would this way be able to lift the statue up?

(If Yes): Why would this way work?

(If No): Why wouldn't this way work? Is there anything they could do to make this way work? (If Yes): What could they do? Why would that work?

3. Okay, you said that this way of pulling the statue up was the best way and should get first prize, right? Why is this way better than these other two ways?

(If no mention of whether the method would work):

Would this way be able to lift the statue up?

(If Yes): Why would this way work?

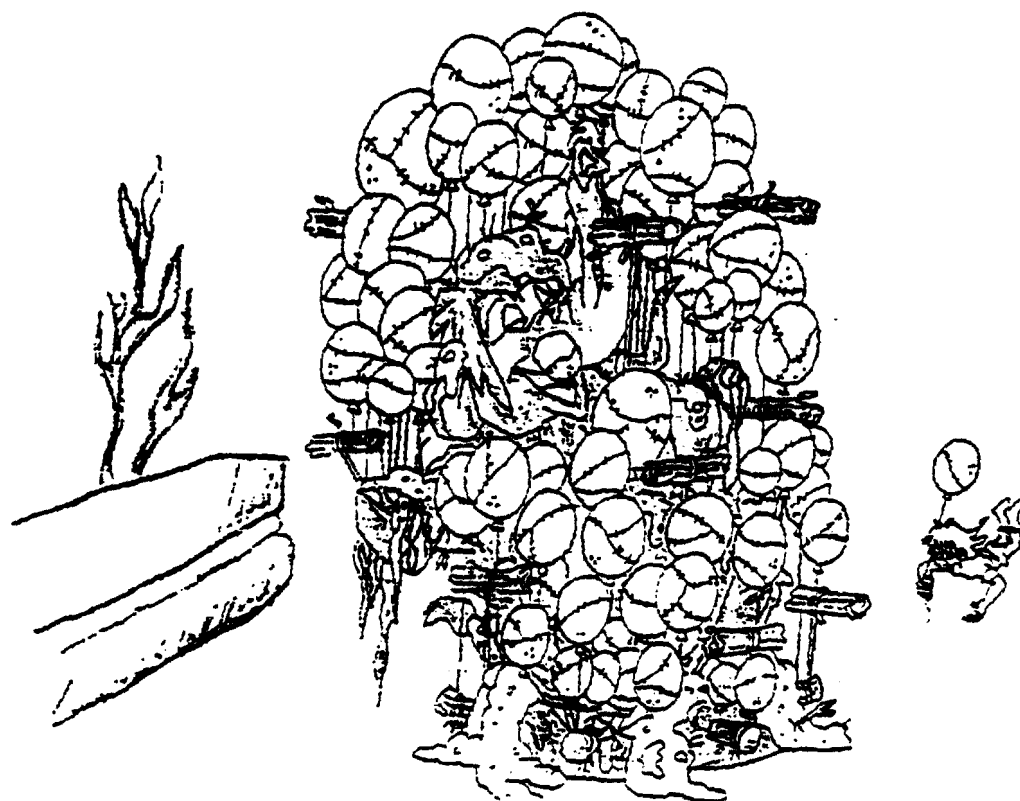
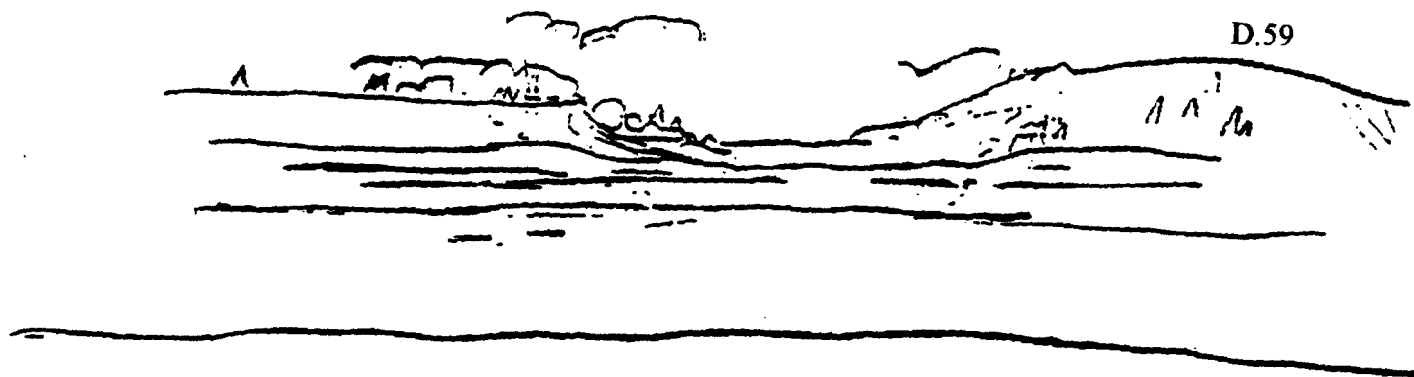
(If No): Why wouldn't this way work? Is there anything they could do to make this way work? (If Yes): What could they do? Why would that work?

D.58



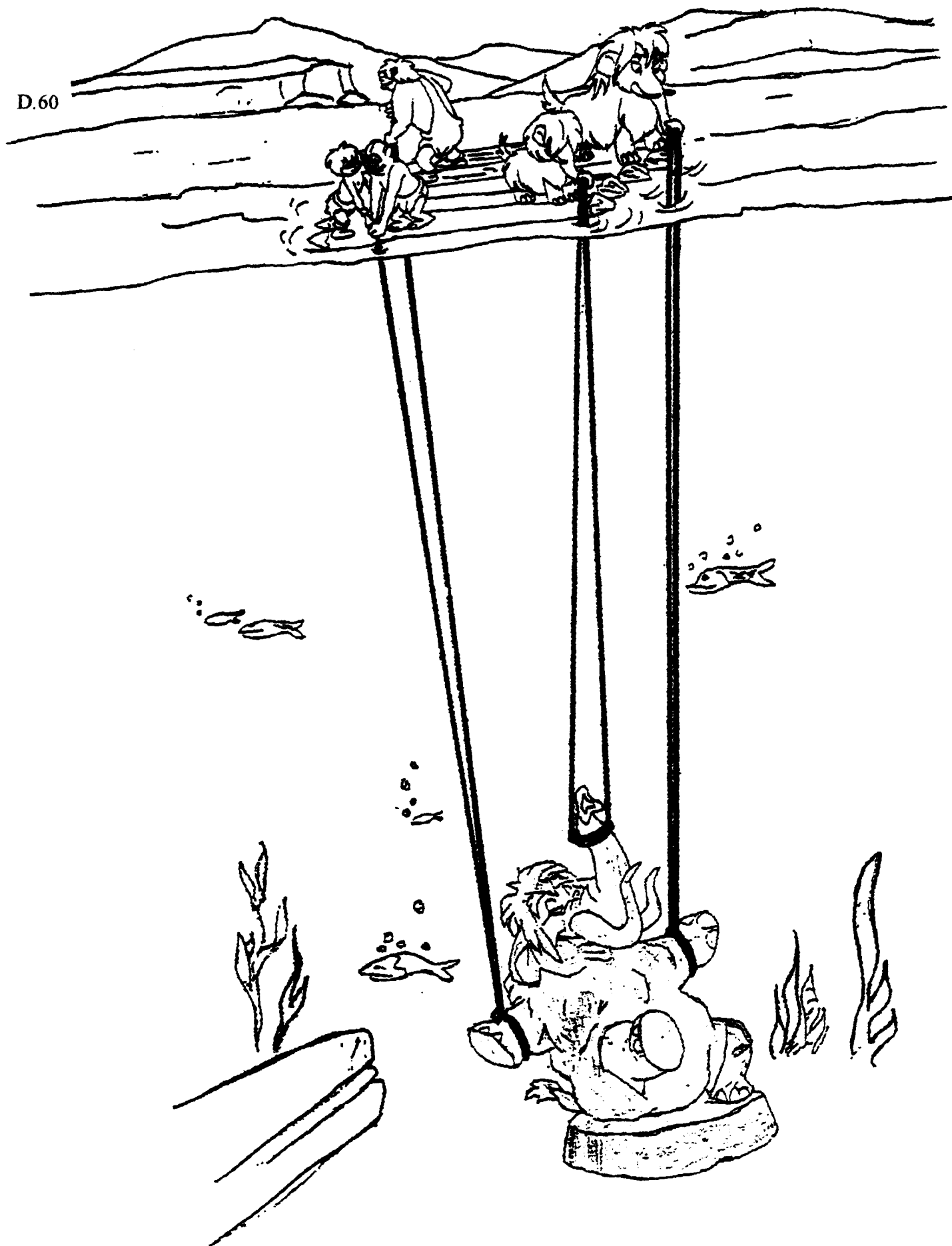
Statue.

D.59

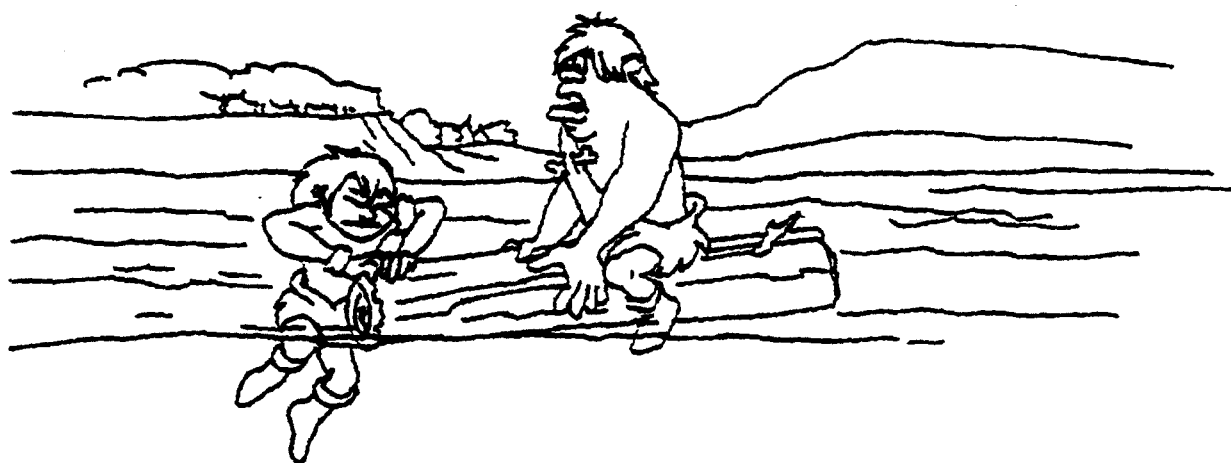


Balloons

D.60



Raft



D. 62

School: McKelvy Fulton

Group: CSD CRO

Name: _____ Age: _____

Name: _____ Age: _____

Boys Girls Mixed

Interview Number. 1 2 3 4

WRITE ORDER OF SORTING HERE - order them from worst to best

3rd 2nd 1st

_____ (child's initials if needed) _____

_____ (child's initials if needed) _____

Appendix E :
Activities Available in the Activity Period

Computer Software:

CRO-Related Technology

Belts & Wheels
Catapults
Timekeepers
Traps & Triggers

Non-CRO Technology

Building Machines

Non Technology

Exploring Oceans
Spellbound

Toys

CRO-Related Technology

DACTA Construction Kits:
Belts & Wheels
Catapult
Trap
Windmill

Non-CRO Technology

DACTA Construction Kits:
Caterpillar
Dog
House
Guitar

Non Technology

Eye Cue Toys:
Puzzle 1
Puzzle 2

Books or Pamphlets:

CRO-Related Technology

Floating and Sinking
Flying and Floating
Fun with Simple Science: Air and Flight
Fun with Simple Science: Liquid and Buoyancy
Make it Work! Machines
Mirror Magic
The Science Book of Energy
The Science Book of Hot and Cold
The Science Book of Light
Science with Light and Mirrors

Non-CRO Technology

How a Book is Made
How Things Are Made
Mistakes that Worked

Non Technology

Backyard Birds
Bananas
My Camera
Making Kites
National Holidays
The President's Cabinet
Rainy Days
Step-by-Step Cookbook
The Story of Money

Appendix F:

Interview Coding Packets:

(Coding Sheet for Part A of all interviews included in Appendix F1)

F1 Interview One: Catapults.....	F.3
F2 Interview Two: Heat anF Insulation.....	F.19
F3 Interview Three: Timekeepers.....	F.29
F4 Interview Four: Buoyancy.....	F.37

Appendix F1:

Interview One Coding Packet:
Catapults

INTERVIEW SCORING: Part I

Name: _____ B G Age: _____

CRO CSD Interview 1 2 3 4

Coder: _____

1) What kinds of things did you see on Cro/Carmen this week?

Show 1 Show 2

[SHOW 1]

CONTENT: Devices types Mechanics Device goal Technology

Other: _____

STORYLINE: Characters Show goal Locations Sequence of Events

Other: _____

What kinds of things did you see on [SHOW 2] this week?

CONTENT: Devices types Mechanics Device goal Technology

Other: _____

STORYLINE: Characters Show goal Locations Sequence of Events

Other: _____

2) Did you like show or not?

[Topic 1]

LIKE DISLIKE

Why?

[Topic 2]

LIKE DISLIKE

Why?

3) Want to find out more about:?

[Topic 1]

YES NO

Why/Why not?

[Topic 2]

YES NO

Why/Why not?

4) While you were watching either show, doing anything else?

[Show 1]

YES NO

What?

[Show 2]

YES NO

What?

5) Did you talk with anyone about either show?

YES NO

Who?

Parent Sibling Other relative

Friend (Name: _____ in CRO or CARMEN?)

Other (Who?: _____)

What did you talk about?

6) Did anything to find out more about:?

[Topic 1]

YES NO

What?

[Topic 2]

YES NO

What?

F.6

Coder name: _____ Date: _____

Student name: _____

Condition: _____

School: _____